



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,962	10/07/2003	Shlomo Touboul	60644-8011.US01	6073
22918	7590	08/24/2007		
PERKINS COIE LLP P.O. BOX 2168 MENLO PARK, CA 94026			EXAMINER ANWARI, MACEEH	
			ART UNIT 2144	PAPER NUMBER
			MAIL DATE 08/24/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/680,962

Applicant(s)

TOUBOUL ET AL.

Examiner

Maceeh Anwari

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-90 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-90 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This is the initial Office action based on the 10/680,962 application filed on 10/07/2003. Claims 1-90, as originally filled, are currently pending and have been considered below.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 8-14, 26-32, 39-41, 49-51, 66 and 74 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what distinguishes an "audit record" from any other form of record. Therefore the examiner will take an "audit record" to be any form of a memory log or record.

3. Furthermore claims 19-36 and 48-57 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what distinguishes an "auto-marker" from any other marker. Therefore the examiner will take an "auto-marker" to be any form of an identifier or classifier distinguishing a given e-mail from another.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Art Unit: 2144

Claims 19-36, 48-57, 67-74 and 83-89 are rejected under 35 U.S.C. 101 because the claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or "non-functional descriptive material." Both types of "descriptive material" are non-statutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized.

Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming non-functional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.").

Furthermore claims 37, 58 75 and 90 are rejected under 35 U.S.C. 101 because the claims fail to place the invention squarely within one statutory class of

Art Unit: 2144

invention. On page 3, lines 27 of the instant specification, applicant has provided evidence that applicant intends the "medium" to include signals. As such, the claim is drawn to a form of energy. Energy is not one of the four categories of invention and therefore this claim(s) is/are not statutory. Energy is not a series of steps or acts and thus is not a process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not a combination of substances and therefor not a composition of matter.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim(s) 1 & 8-9 & 11-16 & 19 & 26-27 & 29-34 & 37-39 & 41-42 & 48-49 & 51-52 & 58 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsuji et al (hereinafter Tsuji) U.S. Patent No.: 5,764,898.

Tsuji teaches:

Claim 1: A method for tracking the routing of an electronic document, comprising: embedding a unique identifier within an electronic document (Figures 1, 3-5 & 8 and Abstract & Col. 3 lines 1-10; task tracking unit, tracking object); and monitoring e-mail messages transmitted from senders to recipients, for detection of e-mail messages having the electronic document embedded therewithin or attached thereto, based on

the unique identifier (Figures 1, 3-5 & 8 and Abstract & Col. 3 lines 1-10; task tracking unit, tracking object, and transmitted mail).

Claim 8: further comprising logging a recipient of an e-mail message having the electronic document embedded therewithin or attached thereto, in an audit record, when said monitoring detects the e-mail message (Figures 1, 3-5 & 8 and Abstract & Col. 3 lines 11-25; control information unit, and log information).

Claim 9: further comprising logging a sender of an e-mail message having the electronic document embedded therewithin or attached thereto, in an audit record, when said monitoring detects the e-mail message (Figures 1, 3-10 and Abstract & Col. 3 lines 11-25; control information unit, and log information).

Claim 11: further comprising generating a tracking report from audit records, corresponding to at least one specified document (Figures 1, 3-10 and Abstract & Col. 3 lines 11-25; control information unit, and log information).

Claim 12: further comprising generating a tracking report from audit records, corresponding to at least one specified user (Figures 1, 3-10 and Abstract & Col. 3 lines 11-25; control information unit, and log information).

Claim 13: further comprising generating a tracking report from the audit records, corresponding to a specified time period (Figures 1, 3-10 and

Art Unit: 2144

Abstract & Col. 2 lines 36-67; control information unit, log information, fixed time interval and deadlines).

Claim 14: further comprising logging the most recent file name of a file storing the electronic document, in an audit record, when said monitoring detects an e-mail message having the electronic document embedded therewithin or attached thereto (Figures 1, 3-10 and Abstract & Col. 2 lines 36-67; control information unit, log information, fixed time interval and deadlines for processing of received mail).

Claim 15: wherein said monitoring comprises authenticating the unique identifier (Figures 1 & 3-10 and Abstract & Col. 2 lines 46-55 & Col. 6 lines 34-39; authorized user, control information memory unit, user interface unit).

Claim 16: further comprising issuing a notification if said authenticating fails to authenticate the unique identifier Figures 1 & 3-10 and Abstract & Col. 6 lines 5-17 and lines 34-39; authorized user, issuing warnings).

Regarding **claims 19 & 26-27 & 29-34** all the same elements are listed as in **claims 1 & 8-9 & 11-16**, but in system form rather than method form.

Therefore, the supporting rationale of the rejection to **claims 1 & 8-9 & 11-16** applies equally as well to **claims 19 & 26-27 & 29-34**.

Furthermore regarding **claims 37 & 58**, all the same elements are listed as in **claim 1**, but in computer-readable storage medium form rather than method form. Therefore, the supporting rationale of the rejection to **claims 1** applies equally as well to **claims 37 & 58**.

Art Unit: 2144

Claim 38 is substantially the same as **claim 1** and is thus rejected for reasons similar to those in rejecting **claim 1**.

Claim 39: The method of claim 38 further comprising logging an audit record of the transmission, when a network packet containing the electronic document is detected by said monitoring (Figures 1, 3-5 & 8 and Abstract & Col. 3 lines 11-25; control information unit, and log information).

Claim 41: wherein said logging includes logging a destination of the transmission in the audit record (Figures 1, 3-5 & 8 and Abstract & Col. 3 lines 11-25; control information unit, and log information).

Claim 42: wherein said monitoring monitors networks packets transmitted internally within an organization network (Figures 1, 3-5 & 8 and Abstract & Col. 3 lines 11-25; control information unit, and log information).

Claims 48-49 & 51-52 all list the same elements of **claims 38-39 & 41-42**, but in system form rather than method form. Therefore, the supporting rationale of the rejection to **claims 38-39 & 41-42** applies equally as well to **Claims 48-49 & 51-52**.

7. The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an

Art Unit: 2144

application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claim(s) 59-75 & 76-79 & 83-86 & 90 are rejected under 35 U.S.C. 102(e) as being anticipated by Barchi U.S. Patent No.: 6,507,866.

59. A method for controlling distribution of an electronic document within computer networks, comprising: intercepting e-mail messages being transmitted from senders to recipients (Figures 1-8 and Abstract and Col. 6 lines 4-26; Hunt mode and Gather mode); scanning the intercepted e-mail messages for detection of a specified electronic document embedded therein or attached thereto (Figures 1-8 and Abstract and Col. 6 lines 4-26; Hunt mode and Gather mode); examining a policy to determine whether or not transmission of the document to a recipient is permitted, if said scanning detects an e-mail message having the electronic document embedded therein or attached thereto (Figures 1-8 and Abstract and Col. 6 lines 4-26; Hunt mode and Gather mode and thresholds and message filtering); and causing transmission of the document to the recipient to be blocked, if said examining determines that transmission is not permitted (Figures 1-8 and Abstract and Col. 4 line 58- Col. 5 line 7 & Col. 6 lines 4-26; Hunt mode and Gather mode and setting flags and threshold limitations).

60. wherein said scanning detects the electronic document based on a unique identifier embedded therewithin (Figures 1-8 and Abstract and Col.

Art Unit: 2144

6 lines 4-26; Hunt mode and Gather mode and headers and pertinent information).

61. wherein the policy indicates recipients permitted to access the electronic document (Figures 1-8 and Abstract and Col. 6 lines 4-26; Hunt mode and Gather mode and thresholds and message filtering).

62. wherein the policy indicates recipients not permitted to access the electronic document (Figures 1-8 and Abstract and Col. 6 lines 4-26; Hunt mode and Gather mode and thresholds and message filtering).

63. wherein the policy indicates senders permitted to send the electronic document (Figures 1-8 and Abstract and Col. 6 lines 4-26; Hunt mode and Gather mode and thresholds and message filtering and receiver limitations).

64. wherein the policy indicates senders not permitted to send the electronic document (Figures 1-8 and Abstract and Col. 6 lines 4-26; Hunt mode and Gather mode and thresholds and message filtering and sender limitations).

65. further comprising issuing a notification, if said examining determines that transmission is not permitted Figures 1-8 and Abstract and Col. 6 lines 4-26; Alarm mode and thresholds limitations and setting flags).

66. The method of claim 59 further comprising generating an audit record to record transmission of the electronic document via an e-mail message, if said examining determines that transmission is permitted (Figures 1-8

Art Unit: 2144

and Abstract and Col. 6 lines 4-26; Hunt mode and Gather mode and record tables).

Claims 67-74 lists all the same elements of **claims 59-66**, but in system form rather than method form. Therefore, the supporting rationale of the rejection to **claims 59-66** applies equally as well to **claims 67-74**.

Claims 75 and 90 lists all the same elements of **claim 59**, but in Computer readable storage medium form, rather than method form. Therefore, the supporting rationale of the rejection to **claim 59** applies equally as well to **claims 75 and 90**.

Claims 76-79 are substantially the same as **claims 59-62**, and is thus rejected for reasons similar to those in rejecting claims **59-62**.

Claims 83-86 list all the same elements of **claims 76-79**, but in system form rather than method form. Therefore, the supporting rationale of the rejection to **claims 76-79** applies equally as well to **claims 83-86**.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Art Unit: 2144

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Examiner Note: Claims 1-18 and 38-47 and 59-66 and 76-82 all list the same elements of claims 19-36 and 48-57 and 67-74 and 83-89 (respectively) except in system form rather than method form. Therefore, the supporting rationale of the rejection to claims 11-18 and 38-47 and 59-66 and 76-82 applies equally as well to claims 19-36 and 48-57 and 67-74 and 83-89 (respectively).

11. Claims 2-7 and 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuji, as applied above, and further in view of Scheier et al (hereinafter Scheier) U.S. Publication No.: 2002/0035584 A1.

Tsuji teaches the invention as discussed above.

Tsuji does not appear to explicitly disclose wherein "the electronic document is a Microsoft word document (or Microsoft Excel spreadsheet or Microsoft PowerPoint presentation or Adobe PDF document or HTML document or XML document)."

Scheier teaches, "the electronic document is a Microsoft word document (or Microsoft Excel spreadsheet or Microsoft PowerPoint presentation or Adobe PDF document or HTML document or XML document)" as "data retrieval system where the data is returned in formatted text, comma separated values, Word, Excel, PDF and other common formats." (Paragraph 175)

Tsuji and Scheier are analogous art because they are from the same field of endeavor of managing and controlling internet based transactions and e-mail.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Tsuji and Scheier before him or her, to incorporate monitoring electronic mail messages from senders to recipients, as disclosed in Tsuji, with the ability to track and send the various formats of data, as disclosed within Scheier.

The motivation for doing so would have been to more efficiently manage and control various forms of electronic documents.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the present invention to combine Tsuji with Scheier to obtain the invention as specified in the instant claims.

12. Claims 45-47 & 55-57 & 80-82 and 87-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuji, as applied above, and further in view of Scheier et al (hereinafter Scheier) U.S. Publication No.: 2002/0035584 A1.

Tsuji teaches the invention as discussed above.

Tsuji does not appear to explicitly disclose wherein the network packets are transmitted in response to an FTP or HTTP or Instant Messenger download, respectively.

Scheier teaches, that messages maybe sent using many common protocols such as HTTP, HTTPS, FTP, file and others. (Paragraph 150)

Art Unit: 2144

Tsuji and Scheier are analogous art because they are from the same field of endeavor of managing and controlling internet based transactions and e-mail.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Tsuji and Scheier before him or her, to incorporate monitoring electronic mail messages from senders to recipients, as disclosed in Tsuji, with the ability to track and send the various formats of data, as disclosed within Scheier.

The motivation for doing so would have been to more efficiently manage and control various forms of electronic documents.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the present invention to combine Tsuji with Scheier to obtain the invention as specified in the instant claims.

13. Claims 17-18 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuji, as applied above, and further in view of Salzfass et al. (hereinafter Salzfass) U.S. Publication No.: 2002/0042815 A1.

Tsuji teaches the invention as discussed above.

Tsuji also teaches, authenticating and allowing permission to transmit the electronic document to a recipient of and e-mail message. (Figures 1 & 3-10 and Abstract & Col. 4 lines 36-42 & Col. 6 lines 34-39; authorized user, control information memory unit, user interface unit, prompting and warning messages)

Tsuji does not explicitly disclose wherein blocking the transmission of an e-mail message to a recipient if permission is not granted and issuing a notification about the blocking.

However, Salzfass discloses sending a notification message directly to the sender's e-mail address advising him that the intended recipient has set a filter to block certain e-mails. (Figures 2-3 and Par. 62)

Tsuji and Salzfass are analogous art because they both focus on managing and controlling electronic documents (i.e. e-mails).

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Tsuji and Salzfass before him or her, to incorporate an e-mail filter for blocking certain e-mails, as disclosed by Salzfass, with an access control policy, as disclosed by Tsuji.

The motivation for doing so would have been to facilitate a more efficient, safe and through management of monitoring e-mail(s).

14. Claims 10 & 40 & 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuji, as applied above, and further in view of Barchi U.S. Patent No.: 6, 507, 866 B1.

Tsuji teaches the invention as discussed above.

Tsuji also teaches, logging and processing mail within a fixed time interval or within a dead line. (Figures 7-10 and Col. 2 lines 56-67)

Tsuji does not explicitly disclose wherein logging includes logging a date and time of transmission.

However, Barchi discloses the logging of the time stamps of files.
(Col. 7 lines 27-30)

Tsuji and Barchi are analogous art because they both focus on managing and controlling electronic documents (i.e. e-mails).

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Tsuji and Barchi before him or her, to incorporate time stamping e-mails, as disclosed by Barchi, with logging and processing e-mails within a fixed time interval or within a given deadline, as disclosed by Tsuji.

The motivation for doing so would have been to facilitate a more efficient, safe and through management of monitoring e-mail(s).

15. Claims 43-44 & 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuji, as applied above, and further in view of Barchi U.S. Patent No.: 6, 507, 866 B1.

Tsuji teaches the invention as discussed above.

Tsuji also teaches, monitoring network packets transmitted internally within an organization network (Figures 1, 3-5 & 8 and Abstract & Col. 3 lines 1-10).

Tsuji does not explicitly disclose wherein monitoring network packets transmitted internally within an organization network to outside of the organization network; or monitoring network packets transmitted to an organization network from outside of the organization network.

Art Unit: 2144

However, Barchi discloses a Hunt mode where information is gathered from all incoming mail and a Gather mode. (Figure1 and Col. 6 lines 4-26)

Tsuji and Barchi are analogous art because they both focus on managing and controlling electronic documents (i.e. e-mails).

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Tsuji and Barchi before him or her, to incorporate monitoring network packets internally within an organization network, as disclosed by Tsuji, with being able to monitor network packets transmitted internally and outside of the organization network , as disclosed by Barchi.

The motivation for doing so would have been to facilitate a more efficient, safe and through management of monitoring e-mail(s).

Examiner Note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in its entirety as potentially teaching of all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maceeh Anwari whose telephone number is

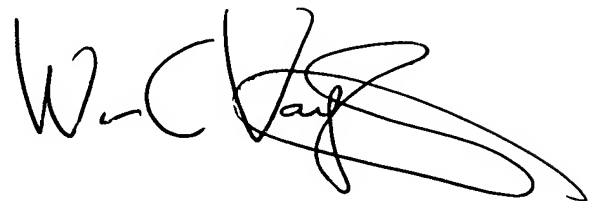
Art Unit: 2144

571-272-7591. The examiner can normally be reached on Monday-Friday 7:30-5:00 PM ES.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

M.A.

A handwritten signature in black ink, appearing to read "W. C. Vaughn". The signature is stylized with a large, sweeping loop at the end.